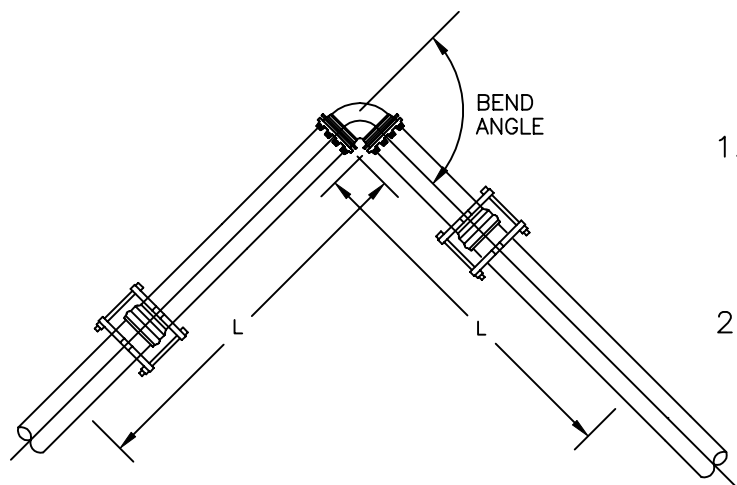


HORIZONTAL BEND

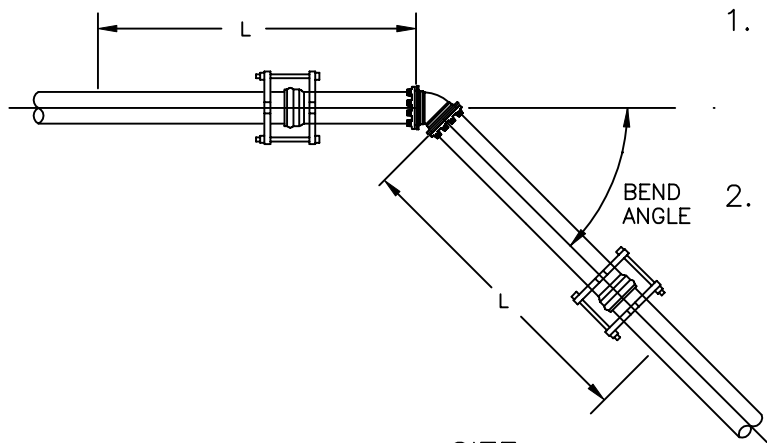


1. ALL JOINTS WITHIN LENGTH "L" MUST BE RESTRAINED. USE RETAINER GLAND AT MECHANICAL JOINTS AND HARNESS WITH PUSH-ON PIPE PER CITY STD. SPECIFICATIONS.
2. FOR TEST PRESSURES AND LAYING CONDITIONS SEE SECTION OF GENERAL NOTES FOR USE OF RESTRAINED JOINT LENGTHS.

BEND ANGLE	SIZE							
	4	6	8	10	12	14	16	
	11.25	3	3	3	4	4	5	5
	22.5	3	5	7	7	9	10	11
	45	7	11	13	15	18	20	23
	90	17	24	31	37	43	49	55

RESTRAINED LENGTHS, "L" (IN FEET)

VERTICAL BEND



1. ALL JOINTS WITHIN LENGTH "L" MUST BE RESTRAINED. USE RETAINER GLAND AT MECHANICAL JOINTS AND HARNESS WITH PUSH-ON PIPE PER CITY STD. SPECIFICATIONS.
2. FOR TEST PRESSURES AND LAYING CONDITIONS SEE SECTION OF GENERAL NOTES FOR USE OF RESTRAINED JOINT LENGTHS.

BEND ANGLE	SIZE							
	4	6	8	10	12	14	16	
	11.25	5	7	9	11	13	15	17
	22.5	11	15	19	23	27	31	35
	45	23	31	40	48	56	64	72

RESTRAINED LENGTHS, "L" (IN FEET)